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Can Cali measure sustainability in its food systems?

Using the Milan Urban Food Policy Pact to gauge progress

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IN PARTNERSHIP WITH:

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KEY MESSAGES

- Cities play a strategic role in building sustainable and resilient food systems by developing effective policies and enabling environments where policymakers and other stakeholders are actively engaging in local and international dialogue. Under the Milan Urban Food Policy Pact (MUFPP) cities are sharing best practices in making diverse food systems more sustainable by relying on public and private monitoring systems to set baseline measurements to gauge the effectiveness of change initiatives.
- Although Cali is not a signatory city, joining the pact would help develop its food system policies as a vehicle to solve social problems while improving community relations, and joining an international call to action.
- Cali's current municipal development plans, strategies and monitoring instruments already allow limited assessment of progress of Cali's food system sustainability based on the MUFPP framework. Out of the proposed 44 MUFPP Monitoring Framework Indicators, 15 are perfectly reflected and covered by current municipal initiatives, 21 are partially covered and 8 indicators are not addressed at all.
- Cali indicators fully aligned with the MUFPP relate to *Food Governance and Sustainable Diets and Nutrition*, while mayor gaps relate to *Food Waste and Food Production* areas.
- Partial and missing indicators reflect gaps in knowledge and intervention areas and highlight clear opportunities for future action aimed at improving Cali's capacities to assess and monitor its food system sustainability.

Why Food Systems Sustainability Matters

Changes in dietary patterns and rapid urbanization is modifying how cities are provisioned with food, water, and essential goods and services, which in turn, has nutritional, socio-economic, and environmental implications. Over the past decade, obesity and overweight have increased, but acute malnutrition continues to exist. Cities play a strategic role in developing sustainable and resilient food systems to ensure the future of urban food and nutrition security. Shifting food demands change what farmers grow and how they grow it, where extensive agricultural practices lead to environmental degradation.

In Cali, the increasing urban population associated with the inflow of Venezuelan migrants and continued rural displacement worsen these pressures. Inequitable access and availability of healthy foods and issues linked to food production, consumption, distribution, and disposal contribute to a cycle of poverty, food insecurity, and malnutrition, where refugees, the urban poor, Afro-Colombian, and indigenous communities are disproportionately affected. There is a dire need to integrate sustainability into development goals — for social equity and healthy diets across all life stages; economic development and prosperity among medium and smallholder businesses and farms; and to preserve environmental diversity and resilience with no harm done to present or future generations.

The Milan Urban Food Policy Pact: A Useful Road Map

Cities around the world face similar issues and they address these problems by sharing lessons learned. The Milan Urban Food Policy Pact (MUFPP) is an effort to build coordinated commitment to foster positive change through recommended actions. It creates a network where city governments from around the globe share sustainable food practices that: (a) provide healthy and affordable food to all; (b) strengthen and support equitable urban, peri-urban, and rural food production; and (c) promote strategies that reduce food waste and

protect the environment. These objectives help cities achieve their municipal development goals while engaging international processes such as the Sustainable Development Goals (SGDs). This non-binding agreement aims to help cities network, highlight good practices and policies, and measure progress towards more sustainable food systems across six categories: *governance; sustainable diets and nutrition; social and economic equity; food production; food supply and distribution;* and *food waste*. While Cali is not a signatory city, evidence from other Latin American signatory cities suggests that joining the pact improves food system policies and contributes new approaches to solve social problems. The associated MUFPP Monitoring Framework Indicators establish baseline measures and monitor progress towards achieving sustainable foods systems using 44 outcome and performance indicators.

The work presented in this brief seeks to provide initial insights for decision-makers in Cali: (a) assess to what extent metrics and mechanisms are already in place to measure and track progress of the city's food system sustainability and (b) identify opportunities for future action through a priority setting methodology.

Scorecard to assess Cali's readiness to monitor its food systems sustainability

The analysis examined the degree to which current indicators tracked in Cali's 2016-2019 Municipal Development Plan, the city's Climate Change Adaptation and Mitigation Plan, the city's Resilience Strategy, and the ENSIN[1] survey matched the 44 Monitoring Framework Indicators from the MUFPP.

The presence of MUFPP key indicators in Cali's municipal initiatives were ranked with a green-yellow-red scheme. Indicators that were present, or were in full agreement, were marked in green, indicators that were partially present were marked in yellow, and those that were absent in were marked in red (Figure 1).

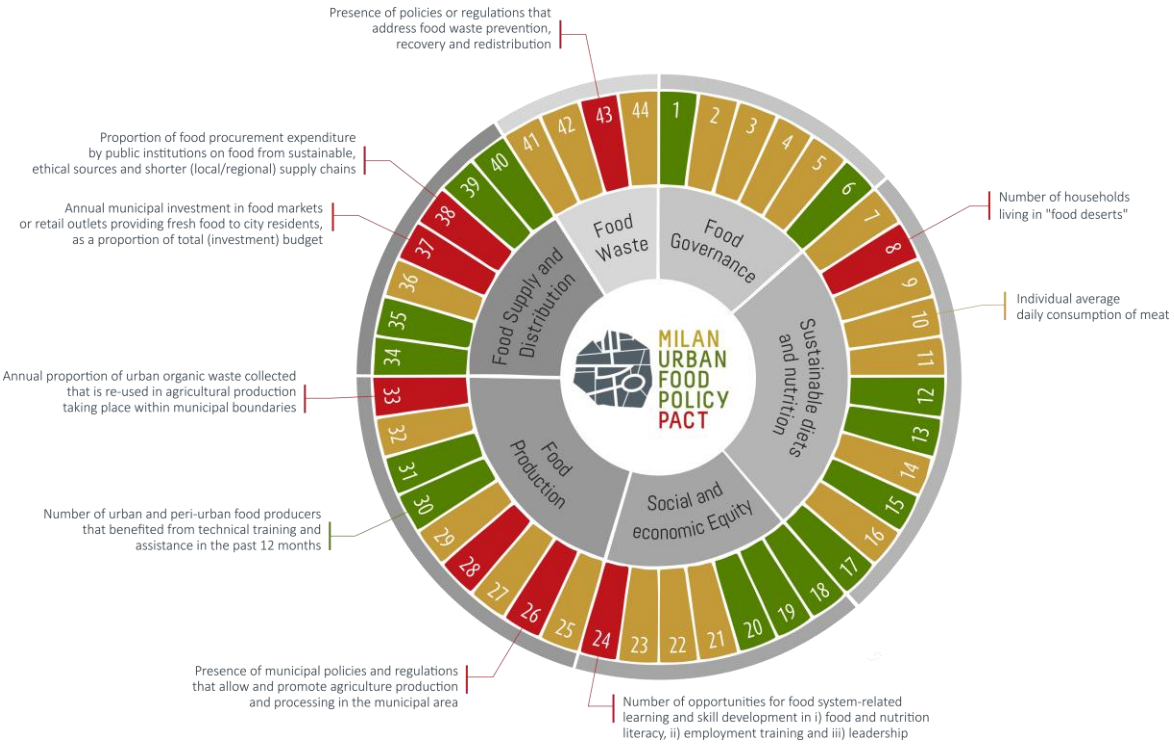

Figure 1. Indicator Scorecard Results

[1] The Encuesta Nacional de Situación Nutricional (ENSIN) is Colombia 's quinquennial health and nutrition survey.

Results show that 15 MUFPP indicators were in perfect or near perfect agreement with indicators covered by current initiatives in Cali, 21 indicators were in partial agreement (covered some of the relevant data, but missing certain metrics), and 8 indicators were missing or not covered in any document.

The break down across the six thematic categories for action (Figure 2) shows that current indicators for Cali with the highest level of full or partial matching with the MUFPP relate to *Food Governance* and *Sustainable Diets and Nutrition*. Major gaps in terms of coverage relate to *Food Waste* and *Food Production* issues. Partial and missing indicators reflect gaps in knowledge and intervention areas to promote sustainability.

Some degree of missing information exists across all thematic areas examined suggesting a wide range of opportunities for improving Cali's current policy monitoring instruments.

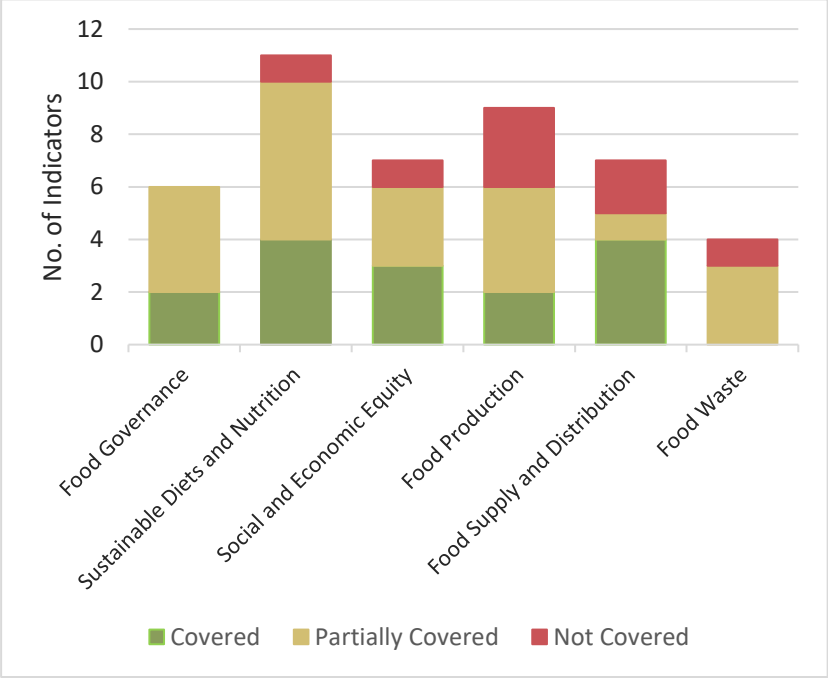

Figure 2. Coverage of MUFPP indicators and categories by Cali's current policy monitoring instruments

Leveraging Strengths and Addressing Gaps to Foster Positive Change

This review of the available metrics, monitoring mechanisms and related stakeholders and institutions helps establish Cali's capacity to assess and monitor the level of progress in food systems sustainability, identifying strengths but also the main gaps that need to be tackled in the near future through new tracking systems and technical or policy related interventions.

Recommendations

- Municipal authorities and institutions currently tracking the 15 MUFPP indicators labeled green in Figure 1 need to **ensure continuous and consistent data collection and reporting** of these standard metrics). For example, **Indicator 12** measures the "*Prevalence of stunting for children under 5 years"*. The ENSIN survey already collects this, among other nutritional data, thus the monitoring system requires no change.

- Municipal authorities and institutions should consider **expanding existing collection and analytics efforts** to strengthen indicators labeled as having partial coverage

(labeled yellow in Figure 1). They might also analyze the adjustments and mechanisms needed to capture all relevant metrics. For example, **Indicator 5** measures the "*Presence of a mechanism for assembling and analyzing urban food system data to monitor/evaluate and inform municipal policy"*.

While there is no specific mechanism listed in municipal documents for analyzing food systems data in Cali, there are observatories that monitor and evaluate processes and policies indirectly tied to food systems. This includes groups studying sustainable transportation, citizen participation, and public policy management. Collaboration between municipal legislators and stakeholders who run these observatories will ensure metrics related to urban food systems are collected and reported in municipal documents, subsequently turning yellow indicators green. Combining efforts would create a strong baseline, but responsibilities need to be clearly defined to avoid redundancies in data collection and analysis.

- Municipal stakeholders should evaluate how they are designing **projects and improve existing monitoring instruments** so that they can start addressing some of the MUFPP indicators that so far, have not been tracked at all (labeled red in Figure 1). For example, **Indicator 8** measures the "*Number of households living in food deserts & food swamps"*.

Cali has not conducted a food system mapping study to date; thus, this is an opportunity for the public sector to partner with researchers and academia to use food asset mapping to better visualize the food landscape.

The absence of some red indicators —specifically the ones assessing presence or existence of a certain policy, program, or mechanism— can easily turn green without the need for extensive research by including their existence as line items in future development plans. However, turning other red and yellow indicators green will require varying amounts of research, data collection, and analyses.

Setting Priorities for Action

A solid diagnostic with measurable indicators provides Cali policymakers with valuable insights into what data are being collected, what actions and policy objectives are needed, and which resources have to be allocated to improve the capacities of the municipality to assess and monitor current practices contributing to the city's food system sustainability based on strategic development goals.

To support the prioritization of which yellow or red indicators need to be adjusted or included to improve future policy and action, a set of high-level criteria are proposed. They are displayed as a **need** and **feasibility** criteria matrix (Table 1 and Table 2, for each of the two categories of indicators, respectively), where *need* concentrates on the audience and magnitude of change, while *feasibility* considers the costs associated with data collection, analysis, interpretation, and ongoing monitoring and evaluation. Indicators deemed as high-need and high-feasibility are identified as priority action areas based on:

- The main goals described in the development plan
- The ease of data collection, level of analysis and interpretation
- The number of people served or serviced by improved programs

Table 1. Strategy Grid for Red Indicators

NEED: High	FEASIBILITY: High
(8) Number of households living in "food deserts" and "food swamps" (28) Proportion of total agricultural population (within the municipal boundaries) with ownership or secure rights over agricultural land for food production, by sex	**(37) Annual investment in food markets providing fresh food** **(38) Proportion of public food procurement expenditure from sustainable/ethical sources** **(43): Presence of policies or regulations that address food waste prevention, recovery and redistribution**
(33) Annual proportion of urban organic waste collected that is re-used in agricultural production taking place within municipal boundaries	(24) Number of opportunities for food system-related learning and skill development in i) food and nutrition literacy, ii) employment training and iii) leadership (26) Presence of municipal policies and regulations that allow and promote agriculture production and processing in the municipal area
NEED: Low	FEASIBILITY: Low

Table 2. Strategy Grid for Yellow Indicators

NEED: High	FEASIBILITY: High
(9) Costs of a nutritious food basket at city/community level (36) Number of fresh fruit and vegetable outlets per 1000 inhabitants (markets and shops) supported by the municipality	**(2) Presence of an active multi-stakeholder food policy and planning structure** **(3) Presence of a municipal urban food policy or strategy and/or action plans** **(4) Presence of an inventory of local food initiatives and practices to guide development and expansion of municipal urban food policy and programs** **(5) Presence of a mechanism for assembling and analyzing urban food system data to monitor/evaluate and inform municipal policy** **(11) Number of adults with type 2 diabetes** **(16) Presence of programs/policies that promote the availability of nutritious and diversified foods in public facilities** **(23) Presence of food-related policies and targets with a specific focus on socially vulnerably groups** **(44) Total annual volume of surplus food recovered and redistributed for direct human consumption**
(7) Minimum dietary diversity for women of reproductive age (MDD-W) (21) Number of formal jobs related to urban food system that pay at least the national minimum or living wage (25) Number of city residents within the municipal boundary with access to an (urban) agriculture garden (32) Proportion of local/regional food producers that sell their products to public markets in the city (41) Total annual volume of food losses & waste	(10) Individual average daily consumption of meat (14) Number of city-led or supported activities to promote sustainable diets (22) Number of community-based food assets in the city (27) Surface area of (potential) agricultural spaces within the municipal boundary (29) Proportion of agricultural land in the municipal area under sustainable agriculture (42) Annual number of events and campaigns aimed at decreasing food loss and waste
NEED: Low	FEASIBILITY: Low

Recommendations

1. The new mayor **should consider making Cali a signatory city of the Milan Urban Food Policy Pact** (MUFPP), and join hundreds of municipalities around the globe in sharing and encouraging sustainable food practices that: (a) provide healthy and affordable food to all; (b) strengthen and support equitable urban, peri-urban, and rural food production; and (c) promote strategies that reduce food waste and protect the environment. This would give international visibility to Cali's commitments towards achieving municipal development goals and engaging international processes while fostering positive change and innovative practices to build a sustainable food system.

2. **Sustainability reporting should be integrated in the 2020-2023 Municipal Development Plan** by maintaining the consistent monitoring of the 15 MUFPP indicators already covered by current municipal plans, strategies and monitoring instruments; rewording existing indicators to reflect specific sustainability metrics; and including indicators that are not currently captured in exiting initiatives.

3. Policymakers and different stakeholders from Cali's food systems **should work together and use the proposed priority setting methodology to identify concrete opportunities for future action** to foster innovative solutions to develop inclusive, resilient and healthy food systems for the city.

Full Report

Aronson, S. 2019. Cali's Food Systems: A Diagnostic Synthesis to Determine Priority Action Areas for Sustainable Food Systems
https://cgspace.cgiar.org/handle/10568/107434

Further Reading

Milan Urban Food Policy Pact. MUFPP Text. 2015 [cited 2019 April 11]; Available from: www.milanurbanfoodpolicypact.org/text/.

Milan Urban Food Policy Pact. Milan Urban Food Policy Pact Monitoring Framework Indicators. 2015 [cited 2019 April 11]; Available from: http://www.milanurbanfoodpolicypact.org/milan-urban-food-policy-pact-monitoring-framework/.

Acknowledgments

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